downward toward the center where discharge ports **100** are located. Thus, any fluid which is intentionally or accidentally discharged into the spiral channel **84**, or into the open inner chamber **98**, will be collected within the turntable **14** and discharged through ports **100**. As the ports **100** will be maintained over the upper surface of carriage **54** at all times, fluid from the turntable **14** will thus flow downward through ports **16** of the carriage **14** and into the receptacle **46**.

Turntable **14** includes a bearing sleeve **102** which is mounted on the spindle **62** so that the turntable **14** is generally free to rotate relative to the carriage **54**. The turntable **14** will also travel laterally with the carriage **54** as it moves along rods **56**. Generally, however, both the carriage **54** and the turntable **14** are urged to the right by spring **58**, absent other forces as will be described hereinafter.

A spiral cam surface **106** (FIG. **4**) is formed on the lower face of bottom panel **82**. The cam surface **106** is aligned with the spiral wall **86** and engages the drive capstan **68**. Thus, spring **58** will generally urge the spiral cam surface **106** against the drive capsten **68** so that firm frictional engagement is maintained. Usually, the cam **68** and cam surface **106** will have mating grooves or other means to prevent slippage. Rotation of the capsten **68** by motor **70** will thus rotate the turntable selectively in either the clockwise or counterclockwise direction. As the turntable is rotated in the clockwise direction (as illustrated in FIG. **3**), the spiral channel **84** moves in a direction from the outer end point **86** toward the inner end point **88**. Conversely, as the turntable **14** is rotated in the counterclockwise direction, the spiral channel beneath the dispensing head **16** moves in a direction from the inner end point **88** to the outer end point **86**. Thus, by incrementally rotating the drive capstan **68**, individual slots within the spiral channel **84** may be brought beneath the discharge fitting **26** of the dispensing head **16**. Additionally, by providing appropriate stop members proximate the outer termination point **86** and the inner termination point **88**, overtravel of the turntable **14** is prevented.

When a collection tube CT is present in the receiving slot, fluid may be discharged into the collection tube. Conversely, when no collection tube CT is present in a particular slot, fluid may be discharged into the turntable **14** and will flow outward through the discharge port **50** in receptacle **46**, as described previously.

Desirably, the drive capstan **68** will be vertically aligned with the discharge fitting **26** of the dispensing head **16**. Such alignment helps assure that the spiral channel **84** will always be positioned directly beneath the dispensing head **16** even though the center of rotation of the turntable **14** will be moving relative to the dispensing head **16**. While it would be possible to position the drive capstan **68** out of alignment with the discharge fitting **26**, it would then be necessary to compensate for movement of the center of rotation of the turntable, making the collector mechanically more complicated.

In a preferred embodiment, the turntable **14** will include a handle **110** extending across the open inner chamber **98**. The handle **110** allows convenient removal and replacement of the turntable onto the spindle **62** on carriage **54**.

In a further preferred embodiment, the turntable of the present invention will include numbering where the collection tube CT on an inclined surface **112** formed about the upper periphery of the turntable **14**. Then numbering allows convenient identification of the slots formed in the spiral channel **84**.

Control of the fraction collector **10** will typically be provided by a microprocessor-based controller (not illustrated) mounted in the base unit **12**. The control unit will allow rotational positioning of the turntable **14** so that a desired slot may be aligned beneath the discharge fitting **26** at dispensing head **16**. Conveniently, the diameter of capstan **68** is chosen so that a fractional or integral multiple of capstan revolutions corresponds to advancement of a single slot beneath the discharge fitting **26**. A flag **72** on the capstan or capstan drive can then be used to control the rotation of the turntable **14** by optically counting the number of capsten revolutions. Advancement may then be controlled by simple on/off control of the motor **70**. In this way, the need to employ more expensive DC servo drives is eliminated. The use of such servo drives, however, would certainly be possible and within the scope of the present invention. Normally, an interface will be provided between the system microprocessor to allow connection of an external monitoring and control unit, such as a personal computer. In this way, operation of the fraction collector **10** can be integrated with total control of the system, typically a chromatographic analysis system.

Although the foregoing invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it will be obvious that certain changes and modifications may be practiced within the scope of the appended claims.

What is claimed is:

1. A fluid collector comprising:

a base unit having a generally horizontal top with a receptacle formed therein, wherein the top is inclined downward toward the receptacle so that fluid spilled on the top will flow into the receptacle, said receptacle having a drain port formed therein to allow discharge of said spilled fluid;

a dispensing arm mounted on the base unit and having a dispensing head positionable to a fixed location over the base unit;

means for holding a plurality of collection tubes in a generally vertical orientation along a predetermined path, said means for holding being enclosed to define a cavity capable of collecting fluid directed therein and said cavity including a drain port;

a dispensing arm mounted on the base unit and having a dispensing head positionable between a fixed location over the base unit and a second location over the horizontal top but not over the means for holding, whereby fluid spilled while the dispensing arm is at or between either location will flow into the receptacle;

means for rotatably mounting the means for holding on the base unit so that the drain port in the cavity remains above the receptacle at all times; and

means for rotating the means for holding relative to the base unit so that collection tubes sequentially pass beneath the dispensing head at its fixed location.

2. A fluid collector as in claim **1**, wherein the predetermined path is a spiral.

3. A fluid collector comprising:

a base unit with a generally horizontal top and having a receptacle formed in the top and a drain port formed in the receptacle;